



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR    | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-------------------------|---------------------|------------------|
| 09/973,445      | 10/09/2001  | Rajan Keshav Panandiker | 8297                | 5965             |

27752            7590            10/24/2003  
**THE PROCTER & GAMBLE COMPANY**  
INTELLECTUAL PROPERTY DIVISION  
WINTON HILL TECHNICAL CENTER - BOX 161  
6110 CENTER HILL AVENUE  
CINCINNATI, OH 45224

|                      |              |
|----------------------|--------------|
| EXAMINER             |              |
| DEL COTTO, GREGORY R |              |
| ART UNIT             | PAPER NUMBER |
| 1751                 |              |

DATE MAILED: 10/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |   |  |
|------------------------------|---|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>09/973,445    | <b>Applicant(s)</b><br>PANANDIKER ET AL. |
|                              | <b>Examiner</b><br>Gregory R. Del Cotto | <b>Art Unit</b><br>1751                  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-25 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a)  The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                    | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                           | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4,5</u> . | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

1. Claims 1-25 are pending.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

***Claim Rejections - 35 USC § 103***

Art Unit: 1751

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 13, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Kleinschmidt (US 3,816,321).

Kleinschmidt teaches a laundering aid comprising a water-insoluble, polyurethane-polyalkyleneimine material releasably combined with a detergent

Art Unit: 1751

composition, said aid providing a means of introducing a detergent composition into a laundry bath and at the same time, serving to adsorb dirt and vagrant anionic dyes from the aqueous laundry media, thereby providing an improved laundering process. See Abstract. Alkylated and alanylated polyethylenimines are obtained by heating alkyl halides, organic acids, or acid halides with the polyethylenimine. See column 3, lines 50-69.

Specifically, Kleinschmidt teaches that polyurethane foam containing about 3 percent by weight of polyethylenimine is prepared by mixing 100 parts polypropylene glycol, 50 parts toluene di-isocyanate, 5 parts polyethylenimine and 0.1 part stannous octanoate and allowed to react at about 50 to 70 degrees Celsius for about 2 hours. The resulting polyurethane-polyethylenimine foam is suitable for use in the articles without further treatment. Accordingly, the broad teachings of Kleinschmidt anticipate the material limitations of the instant claims.

Claims 2-4, 6-8, 10-12, 14-16, 18-20, and 22-24 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kleinschmidt (US 3,816,321).

Kleinschmidt is relied upon as set forth above. Note that, with respect to the product by process claims as recited by instant claims 2-4, 6-8, 10-12, 14-16, 18-20, and 22-24, even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is

Art Unit: 1751

unpatentable even though the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Additionally, once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983). See MPEP 2113. Note that, the Examiner asserts that the polyamines used on the substrates and the resultant substrates containing the polyamines would be the same as recited by the instant claims because Kleinschmidt teaches the use of the same polyamines adhered to a substrate. Accordingly, the broad teachings of Kleinschmidt are sufficient to anticipate the material limitations of the instant claims.

Alternatively, even if the broad teaching of Kleinschmidt is not sufficient to anticipate the material limitations of the instant claims, it would have been nonetheless obvious to one of ordinary skill in the art to arrive at the claimed polyamines and resultant substrates of the composition in order to provide the optimum dye absorption properties to the composition since Kleinschmidt teaches that the amount and types of polyamines used in the compositions and substrates may be varied.

Claims 1, 13, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Edwards (US 3,673,110).

Edwards teaches an adsorbent mass useful in adsorbing dirt and anionic dye molecules in laundering operations and the like which is prepared by modifying a

Art Unit: 1751

cellulosic substrate to render the substrate anionic and thereafter coating the modified surface with certain nitrogen compounds. See Abstract. The nitrogen compounds employed comprise a polyamine backbone having pendant alkyl or alkanoyl groups on the nitrogen atoms. The alkylated and alkanoylated polyethylenimines are obtained by heating alkyl halides, organic acids or acid halides with the polyethylenimine. See column 4, lines 10-60. The nitrogen compound is contacted with the anionic surface and thereby affixed thereto; this can be accomplished in a variety of ways. For example, both the liquid and solid nitrogen can be physically padded or pressed onto the modified anionic surface of the substrate material. When this procedure is used an excess of nitrogen compound will sometimes be coated on the substrate initially, but this excess can be conveniently removed by rinsing the material with water.

Specifically, Edwards teaches that a cotton terry fabric is immersed in a solution and then sprayed with a solution of 20 percent SPEI (polyamine). This amine may be replaced with various other amines. See column 7, line 65 to column 8, line 60. Accordingly, the broad teaching of Edwards is sufficient to anticipate the material limitations of the instant claims.

Claims 2-4, 6-8, 10-12, 14-16, 18-20, and 22-24 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Edwards (US 3,673,110).

Edwards is relied upon as set forth above. Note that, with respect to the product by process claims as recited by instant claims 2-4, 6-8, 10-12, 14-16, 18-20, and 22-24, even though product-by-process claims are limited by and defined by the process,

Art Unit: 1751

determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Additionally, once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983). See MPEP 2113. Note that, the Examiner asserts that the polyamines used on the substrates and the resultant substrates containing the polyamines would be the same as recited by the instant claims because Edwards teaches the use of the same polyamines adhered to a substrate. Accordingly, the broad teachings of Edwards are sufficient to anticipate the material limitations of the instant claims.

Alternatively, even if the broad teaching of Edwards is not sufficient to anticipate the material limitations of the instant claims, it would have been nonetheless obvious to one of ordinary skill in the art to arrive at the claimed polyamines and resultant substrates of the composition in order to provide the optimum dye absorption properties to the composition since Edwards teaches that the amount and types of polyamines used in the compositions and substrates may be varied.

Art Unit: 1751

Claims 1, 13, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnson et al (US 5,698,476) or EP 1,020,513.

Johnson et al teach a system for removing extraneous, random, free-flowing dyes from laundry washing applications which comprise a novel unitary dosing laundry article that can freely circulate among items being laundered. The laundry article further comprises a dye absorber and a dye transfer inhibitor which are introduced into a wash liquor via a support matrix. The dye absorber maintains a relational association with the support matrix in the wash liquor, whereas the dye transfer inhibitor is delivered up from the support matrix to the wash liquor and may be evenly distributed throughout the wash liquor. See Abstract. Note that, the support matrix is considered to deliver the dye transfer inhibitor to the wash liquor when the amount of dye transfer inhibitor that remains associated with the support matrix is less than 20%. See column 8, lines 15-50. Clearly, Johnson et al teach that some of the inhibitor is still fixed to the substrate after washing. Suitable dye transfer inhibiting agents include polyvinyl pyrrolidone, polyvinyl alcohol, polyamine-N-oxides, etc. See column 7, lines 1-20.

Specifically, Johnson teaches examples in which dye absorber such as polyethyleneimine are attached to the substrate as the dye absorber. See column 17, lines 1-25. Additionally, other examples use other nitrogen containing dye absorbers or dye inhibiting agents which are fixed to the surface and remain fixed to the surface in varying amounts after washing.

'513 teaches a laundry article effective for inhibiting transfer of extraneous dyes and soil to articles in a wash liquor, said laundry article comprising a support matrix and

Art Unit: 1751

a functionalized polyamine attached to or entrapped in the support matrix. The functionalized polyamine comprises the reaction product of a cyano- or guanidine-containing compound and a polyamine prepared from at least one monomeric amine.

See Abstract and page 4, line 40 to page 7, line 55.

Specifically, '513 teaches the preparation of substrates containing the polyamine compounds fixed onto the surface of the substrate. See page 8, line 5 to page 11, line 15.

Accordingly, the broad teaching of Johnson et al or '513 are sufficient to anticipate the material limitations of the instant claims.

Claims 2-12 and 14-24 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Johnson et al (US 5,698,476).

Johnson et al are relied upon as set forth above. Note that, with respect to the product by process claims as recited by instant claims 2-4, 6-8, 10-12, 14-16, 18-20, and 22-24, even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Additionally, once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the

burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. In re Marosi, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983). See MPEP 2113. Note that, the Examiner asserts that the polyamines used on the substrates and the resultant substrates containing the polyamines would be the same as recited by the instant claims because Johnson et al teach the use of the same polyamines adhered to a substrate. Accordingly, the broad teaching of Johnson et al are sufficient to anticipate the material limitations of the instant claims.

Alternatively, even if the broad teaching of Johnson et al are not sufficient to anticipate the material limitations of the instant claims, it would have been nonetheless obvious to one of ordinary skill in the art to arrive at the claimed polyamines and resultant substrates of the composition in order to provide the optimum dye absorption properties to the composition since Johnson et al teach that the amount and types of polyamines used in the compositions and substrates may be varied.

Claims 2-4, 6-8, 10-12, 14-16, 18-20, and 22-24 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over EP 1,020,513.

'513 is relied upon as set forth above. Note that, with respect to the product by process claims as recited by instant claims 2-4, 6-8, 10-12, 14-16, 18-20, and 22-24, even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-

Art Unit: 1751

process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Additionally, once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983). See MPEP 2113. Note that, the Examiner asserts that the polyamines used on the substrates and the resultant substrates containing the polyamines would be the same as recited by the instant claims because '513 teaches the use of the same polyamines adhered to a substrate. Accordingly, the broad teachings of '513 are sufficient to anticipate the material limitations of the instant claims.

Alternatively, even if the broad teaching of '513 is not sufficient to anticipate the material limitations of the instant claims, it would have been nonetheless obvious to one of ordinary skill in the art to arrive at the claimed polyamines and resultant substrates of the composition in order to provide the optimum dye absorption properties to the composition since '513 teaches that the amount and types of polyamines used in the compositions and substrates may be varied.

### ***Conclusion***

Art Unit: 1751

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Remaining references cited but not relied upon are considered to be cumulative to or less pertinent than those relied upon or discussed above.

Applicant is reminded that any evidence to be presented in accordance with 37 CFR 1.131 or 1.132 should be submitted before final rejection in order to be considered timely.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory R. Del Cotto whose telephone number is (703) 308-2519. The examiner can normally be reached on Mon. thru Fri. from 8:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (703) 308-4708. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Gregory R. Del Cotto  
Primary Examiner  
Art Unit 1751

GRD  
October 18, 2003